

The information disclosure statement was submitted on the basis of an EPO search report. The Applicant hereby re-submits copies of all patents cited in the EPO search report.

Claim Rejections – 35 USC §103

Claims 1, 4-6, 8-14, 17-19, 21-26, 29-31, 33-39, 43-46 and 50-53 were rejected under 35 U.S.C. 103(a) as being unpatentable over DeSimone et al., U.S. Patent 6,212,548 (hereinafter DeSimone). This rejection is respectfully traversed.

Applicants' exemplary claim 1 recites:

“A method of managing a virtual private network, the method comprising:
receiving a request to join a given virtual private network having a set of
network devices, the request being received from a given network device having a
given network device identifier that identifies the given network device;
retrieving, from a network device memory set, a set of network device
identifiers that identify all network devices in the set of network devices;
forwarding a notify message to each network device in the set of network
devices, the notify message including the given network device identifier;
forwarding a join message to the given network device, the join message
including the set of network device identifiers; and
storing, in the network device memory set, the given network device
identifier.”

The Applicants' invention thereby enables the dynamic addition of network devices to a virtual private network (“VPN”). VPNs are networks that have the look, feel, and security of a private (e.g. corporate LAN) network; however, they are actually deployed across third party networks, such as the internet, e.g. via IP tunneling. More particularly, the exemplary claim 1 includes the step of receiving a request to join a given virtual private network having a set of network devices, the request being received from a given network device having a given network device identifier that identifies the given network device. The claimed request prompts the

notification of the other network devices of the addition of the given network device to the VPN. A join message is sent to the given network device to inform it of the other members of the VPN. The members of the VPN are thus aware of each other and can, amongst other things, dynamically set up VPN tunnels amongst themselves.

DeSimone, in contrast, describes a network chat application, which users might employ to communicate with each other across the internet. DeSimone does not at all address any issues associated with management of VPNs and particularly with the addition or removal of network devices from a VPN. DeSimone's chat room application is agnostic as to whether the application traverses a public or private network. Thus, DeSimone fails to teach or suggest the Applicants' claimed method of managing a virtual private network, the method comprising the step of receiving a request to join a given virtual private network having a set of network devices, the request being received from a given network device having a given network device identifier that identifies the given network device.

The Office Action admits that the method of DeSimone is directed towards an internet chat session and not to a virtual private network, but contends that "it would be clear to one of ordinary skill in the art to use the teaching of DeSimone in communicating a variety of messages and in communicating mixed-mode messages including messages used to set up a virtual private network." The Applicants disagree with this rationale.

First of all, the mixed-mode messages described at the cited paragraph refer to text, voice, and video messages. These types of messages would not be useful for setting up a virtual private network. Furthermore, the chat room teachings of DeSimone provide no teachings or suggestions as to how one might set up a VPN, for example a VPN including devices that service the servers and terminals of DeSimone. DeSimone is simply not directed toward network setup;

rather, DeSimone is directed only toward an application that happens to send messages across a network that is already set up. Therefore one skilled in the art would not look to DeSimone for suggestions as to how to set up a network and in particular a VPN. The Applicants therefore respectfully assert that claim 1 and its dependent claims 2 – 13 are currently in condition for allowance.

Applicants' independent claim 14 sets forth similar apparatus including “an input that receives a request to join a given virtual private network having a set of network devices, the request being received from a given network device having a given network device identifier that identifies the given network device”. The Applicants therefore respectfully assert that claim 14 and its dependent claims 15 – 25 are currently in condition for allowance for the same reasons as set forth for claim 1.

Applicants' independent claim 25 sets forth a similar computer program product including “program code for receiving a request to join a given virtual private network having a set of network devices, the request being received from a given network device having a given network device identifier that identifies the given network device”. The Applicants therefore respectfully assert that claim 25 and its dependent claims 26 – 39 are currently in condition for allowance for the same reasons as set forth for claim 1.

Applicants' independent claim 39 sets forth a method of managing a virtual private network including the steps of “maintaining a storage device having the device identifier of each member of the set of network devices, the storage device being updated as network devices are added to and removed from the virtual private network” and “receiving a request to join the virtual private network, the request being received from a given network device having a given network device identifier and data identifying the virtual private network”. The Applicants

therefore respectfully assert that claim 39 and its dependent claims 40 – 45 are currently in condition for allowance for the same reasons as set forth for claim 1.

Applicants' independent claim 46 sets forth a computer program product including "program code for maintaining a storage device having the device identifier of each member of the set of network devices, the storage device being updated as network devices are added to and removed from the virtual private network" and "program code for receiving a request to join the virtual private network, the request being received from a given network device having a given network device identifier and data identifying the virtual private network". The Applicants therefore respectfully assert that claim 46 and its dependent claims 47 – 52 are currently in condition for allowance for the same reasons as set forth for claim 1.

Applicants' independent claim 53 sets forth a method of managing a virtual private network including the step of "a given network device transmitting a request to join the virtual private network having a set of network devices, the given network device having a given network device identifier that identifies the given network device". The Applicants therefore respectfully assert that claim 53 and its dependent claim 54 are currently in condition for allowance for the same reasons as set forth for claim 1.

Claims 2, 3, 7, 15, 16, 20, 27, 28, 32, 40-42, 47-49 and 54 were rejected under 35 U.S.C. 103(a) as being unpatentable over DeSimone as applied to claims 1, 14, 26, 39, and 46 and further in view of J. Oikarinen, RFC 1459, Internet Relay Chat Protocol (Oikarinen). This rejection is respectfully traversed.

Like DeSimone, Oikarinen is directed to internet relay chat sessions. Like DeSimone, Oikarinen does not address management of VPNs. The combination of Oikarinen with DeSimone therefore fails to teach or suggest the Applicants' invention as set forth in the

independent claims for all the reasons as set forth for claim 1. The Applicant therefore respectfully asserts that claims 2, 3, 7, 15, 16, 20, 27, 28, 32, 40-42, 47-49 and 54 are currently in condition for allowance.

Applicants have made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Mary Steubing, Applicants' Attorney at 978-264-6664 so that such issues may be resolved as expeditiously as possible.

For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,

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